

Preface

Quasicrystals – where are we now? The state-of-the art in quasicrystal research was presented at the Tenth International Conference on Quasicrystals (ICQ10), which took place at ETH Zurich, Switzerland, July 6–11, 2008. ICQ10 was attended by 153 scientists (22 female) from 25 countries, including 32 PhD students and 12 undergraduates (8 female). There were 23 invited talks (3 female speakers) and 36 contributed lectures (4 female speakers). The conference was highly interdisciplinary reflecting the composition of the community which comprises mathematicians, theoretical and experimental physicists, chemists and materials scientists.

The proceedings of this exciting conference are now published as *open access* papers in issues 11/12 2008 and 1/2 2009 of *Zeitschrift für Kristallographie*. They have been reviewed in the usual way. Although the 67 publications reflect only a part of the scientific contributions presented at ICQ10, they cover the full range of topics from *Formation, growth and stability, Mathematical and theoretical aspects, Structure and modeling, Surfaces, thin films and coatings, Physical properties and applications, Beyond metallic quasicrystals* to *Complex metallic alloys*.

ICQ10 was the 10th conference in a series that started with the “International Workshop on Aperiodic Crystals” Les Houches, France, 1986, followed by the “International Workshop on Quasicrystals” Beijing, China, 1987, the “International Meeting on Quasicrystals” Vista–Hermosa, Mexico, 1989, by ICQ4 in St. Louis, Missouri, USA, 1992, ICQ5 in Avignon, France, 1995, ICQ6 in Tokyo, Japan, 1997, ICQ7 in Stuttgart, Germany, 1999, ICQ8 in Bangalore, India, 2002, and ICQ9 in Ames, Iowa, USA, 2005.

The focus of the conference was clearly on studies of quasicrystal surfaces and epitaxial layers reflecting the very active community in this field. Another focus was on structure and properties of the new class of Tsai-cluster based quasicrystals. The conference has shown a clear progress and grown understanding in many areas of quasicrystal research. However, there are still many questions open concerning formation, structure and stability of quasicrystals.

The Jean Marie Dubois Award for Excellence in Quasicrystal Research 2008 was given at ICQ10 to Prof. Dr. Walter Steurer, ETH Zürich. The Jean Marie Dubois Award was established to recognize important, sustained research on any aspect of quasicrystals within the 10-year period preceding the award. The first award was given in 2005, to Professor An-Pang Tsai of Tohoku University. The next award will be presented at ICQ11, which will take place 2011 in Sapporo, Japan.



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